I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4)

Dated: April 22, 2010 Signature: /Carl A. Forest/ (Carl A. Forest)

Docket No. 020008.0112PTUS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Ofer Sneh

Application No.: 10/563,519 Confirmation No.: 8637

Filed: June 20, 2006 Art Unit: 1792

For: APPARATUS AND METHOD FOR DOWNSTREAM PRESSURE CONTROL AND SUB-ATMOSPHERIC REACTIVE GAS ABATEMENT

Examiner: K.T. Chen

DECLARATION OF OFER SNEH REGARDING CLAIM FEATURES AND DEPOSITION SPEED

I, Ofer Sneh, hereby declare:

1. I am Founder of Sundew Technologies, LLC as well as Management Committee member and Officer of the same organization. My responsibilities include setting and executing guidelines, priorities, and road mapping of the company's technology, product development, prototyping, engineering and manufacturing, intellectual property, customer and vendor relations, and research collaboration programs. All statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true.

2. I earned a Ph.D. in chemical physics in 1992 and have worked in this technology for over eighteen years, including a number of years prior to earning my Ph.D., focusing in the area of deposition processes, and in particular atomic layer deposition (ALD). I have published more than thirty papers and presentations on the subject of

deposition processes and have more than twenty-five issued US patents in the field, and have another thirty patents pending.

3. I am an inventor in the above-identified patent application (hereinafter "the application") and Sundew Technologies, LLC (hereinafter "Sundew") is the assignee of the application.

4. I have previously provided a Supplemental Declaration of Ofer Sneh, Ph.D. (hereinafter, "the Supplemental Declaration.")

5. In the Office Action Dated 01/26/2010, the Examiner states that I did not provide evidence that attributes commercial success to the features of the claim in the instant application. On the contrary, in paragraphs 17 through 24 and 28 of the Supplemental Declaration I specifically attributed the commercial success to the features in the claims.

6. The features of the claims I referred to in paragraphs 17 through 24 and 28 comprise a pressure control system for controlling the pressure in a process chamber, the a pressure control system including a pressure control chamber (PCC) located between a first immobile flow restricting element and a second immobile flow restricting element, a gas source, a flow control device downstream form the gas source and upstream from the PCC, which system is located between the process chamber and a vacuum pump.

7. How this pressure control system leads to increased speed of the atomic layer deposition (ALD) process is explained in the specification, particularly at page 7, line 1 through page 9, line 24 and page 20 line 13, through page 25, line 14. These sections specifically state that the faster speed is due to the FRE/PCC/FRE/PUMP and the role of the control using a gas source and associated valve rather than a throttle valve.

8. These sections also point out that the absence of mechanical moving parts in the flow control system contributes to the speed of the system.

9. In the Supplemental Declaration, paragraph 28, I state that the speed of the ALD is increased a thousand fold by the claimed structure.

10. Thus, my statements in the Supplemental Declaration are completely supported by and consistent with the original specification.

11. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

4-21-2010
Date

Ofer Sneh